

**M. TECH.-I (ELECTRICAL -POWER SYSTEM) (CBCS – 2015
COURSE) : WINTER - 2017
SUBJECT: RESEARCH METHODOLOGY**

Day: **Monday**
Date: **15/01/2018**

W-2017-2792

Time: **11.00 AM TO 02.00 PM**
Max. Marks: 60

N.B.:

- 1) All questions are **COMPULSORY**.
- 2) Figures to the right indicate **FULL** marks.
- 3) Answers to both the sections should be written in **SEPARATE** answer book.

SECTION-I

Q.1 Distinguish between Research methods and Research methodology. **(10)**

OR

Q.1 What are the different steps involved in a research process? **(10)**

Q.2 'The task of defining the research problem often follows a sequential pattern'? **(10)**
Explain.

OR

Q.2 'Knowing what data is available often serves to narrow down the problem it self as well as the technique that might be used'. Explain in context with defining a research problem. **(10)**

Q.3 Explain the following in context with a Research design. **(05)**
i) Research hypothesis **(05)**
ii) Experimental and control groups **(05)**

OR

Q.3 Explain and illustrate the procedure of selecting a random sample. **(10)**

SECTION - II

Q.4 'It is never safe to take a published statistics at their face value without knowing their meaning and limitations'? Explain the statement with examples. **(10)**

OR

Q.4 'Discriminate use of average is very essential for sound statistical analysis'. Justify giving examples. **(10)**

Q.5 Write short notes on: **(10)**
i) Techniques of writing report
ii) Characteristics of a good research report

OR

Q.5 'Report writing is more an art that hinges upon practice and experience'. Justify the statement. **(10)**

Q.6 Explain the IP laws of India. How these laws are twisted? **(10)**

OR

Q.6 Write a short note on the following: **(10)**
i) Patents
ii) Trademark Design and copyright